

# **WWF Project Technical Progress Report**

Project No/Activity No	623-A-00-98-00064-00
Project Title	WWF Tarangire National Park Project
Activity Title(if different)	
Reporting Period	1 <sup>st</sup> January - 30 June, 2002

#### 1. Introduction

Tarangire National Park (TNP) is situated in northern Tanzania and covers an area of more than 2,600 square kilometers. It is home to one of the largest elephant populations in East Africa. The park is also rich in other mammals, many of which move out of the park during the rainy season. The Tarangire River flows through the entire park, and with its associated wetlands, provides a year round source of fresh water. TNP serves as a critical dry season (July – December) refuge for wildlife in the 20,000 square kilometer Maasai Steppes.

Though the park's importance is unquestioned, it has been faced with several constraints that have hindered the development of a comprehensive management strategy. TNP managers have come to understand that they urgently need reliable information concerning the natural resources base, patterns of human and wildlife utilization of the resources and the extent of pressures on the wetlands.

This project aims to address the above constraints and to help TNP and TANAPA integrate existing and new information into the management decision making process. The main focus of this project however is conservation of the Tarangire River wetlands. Also included is capacity building in ecological monitoring, vegetation and participatory land use mapping, and large mammal surveys in the whole Tarangire ecosystem.

### 2. Objectives

The overall objective of this project is to sustainably conserve the Tarangire wetland system. The aim is to achieve this through increased capacity in ecological monitoring including establishment of a GIS center at TNP for the production of ecological information that will be integrated into park management decisions. Aim is also to establish a desk top publishing unit at TANAPA headquarters for the production of information materials like newsletters, brochures, guide books maps, and post cards on Tarangire and Lake Manyara NP.

This project aims to achieve the following:

- Tarangire/Lake Manyara wetlands sustainably conserved
- · Increased knowledge of population dynamics of large mammals in the ecosystem.
- Migratory routes and dispersal areas of elephants and other large mammals in the Tarangire Ecosystem described and mapped.
- · Vegetation and land use pattern of the Tarangire ecosystem mapped.
- GIS center established; relevant TANAPA staff trained and capable of gathering, storing, retrieving, analyzing and interpreting ecological data which in-turn could be used for enhancing the park's conservation and management.
- · Capacity for desktop publishing at TANAPA headquarters established.
- Two postgraduate students trained; dissertations on Wildlife ecology and Land-use produced at MSc level.
- · Overall management of Tarangire National Park and its natural resources improved.

#### 3. Progress

The following activities were implemented under this objective during the six month period:

### 1. Sustainable conservation of Tarangire river and its associated wetlands

Selected local NGOs and Institutions are carrying out activities for this objective in collaboration with WWF. The selected local NGOs include Mazingira Bora Karatu and FIDE. The local institutions are Monduli Development Council (MDC), Kondoa District Council, Karatu District Council, Mbulu District Council and TANAPA's Ecological Monitoring Department.

- Rehabilitation of eroded catchment slopes of Lake Babati was carried out by FIDE, as the contracted NGO in the area. This involved raising and planting of tree seedlings on the eroded areas and gullies and raising awareness to local communities on good farming practices. During the six months, a total of 41,363 tree seedlings have been planted on eroded slopes of Lake Babati. Primary school teachers and village leaders from Nangara, Singe, Managhat and Nakwa villages have been provided with training on nursery and tree management seminar. This activity will continue in the next reporting period.
- MBK has facilitated planting of 25,000 seedlings on the eroded slopes of Lake Manyara

- in Kilimatembo, Tloma and Rhotia villages.
- TANAPA's Ecological Monitoring Unit continued carrying out monitoring of water quality within the Tarangire/Lake Manyara catchment basin. Data collection for water quality analysis continues.
- Mbulu and Karatu District Councils conducted community sensitization meetings on the need to rehabilitate eroded slopes of Lake Manyara.
- Kondoa District Council conducted community awareness creation meetings on the conservation of the sources of Tarangire river.

### **Vegetation and Participatory land-use mapping**

Preparation of vegetation maps for the Tarangire Ecosystem has been completed. This
was carried out by OIKOS. Production of land-use maps for selected villages, which
have high potential for being turned into WMAs within the Tarangire Ecosystem has
been completed.

## **Ecological Monitoring**

- Construction of a GIS center in Tarangire National Park has been completed in October 2001. Furnishing of the center with the needed hardware and software is completed.
- Data processing, analysis, and report writing on the wet season census of large mammals was carried out by TWCM/TAWIRI and has been completed.
- The inventory of plants by the National Herbarium of Tanzania has been completed. So far around 200 collections have been made, most of which have been identified representing plants from about 50 different families and a first draft of a plant guide book of the area has been produced. A final draft is planned to be completed in October 2002.
- The inventory of birds, reptiles & amphibians of the area has proceeded further. The
  Department of Zoology, University of Dar Es Salaam has continued to carry out the
  survey. Preparation of a guidebook is expected to start after completion of the
  inventory work.
- Training of a graduate student in Wildlife Ecology (Ms Msoffe) continued. Data collection and analysis for her Masters Thesis has been completed and Ms Msoffe's Dissertation is in the final stages of completion.
- Radio tracking of elephants by OIKOS, which started in January 1999, has been completed and the project final report has been produced.
- OIKOS continued to provide hands on training to park ecologists and other relevant TNP staff on ecological monitoring.
- · A land use cover map for Tarangire NP has been completed.

### Establish and train Desktop publishing Unit at TANAPA headquarter

 Training of three TANAPA staff members on Desk Top Publishing continued during the reporting period and was conducted by Africa Vision, an US based company with an office in Dar Es Salaam.

### 4. Outputs this reporting period

The following Reports and Minutes have been produced during the reporting period:

- A draft manuscript of a plant guidebook for Tarangire National Park has been produced.
- A draft manuscript for a guidebook on Butterflies of Tarangire and Lake Manyara National Parks has been produced.
- A report on the wet season census of large mammals has been produced by TWCM/TAWIRI.
- · A draft MSc Dissertation on Wildlife Ecology by Ms Msoffe has been produced.

## 5. Targets attained and important development during the reporting period

- · Procurement and installation of GIS hardware and software has been completed.
- · A database for the GIS center has been designed and data entry is on-going.
- Two agreements with Mbulu and Karatu District Councils were drawn and signed and the new partners started implementing wetland conservation activities in Mbulu and Karatu degraded slopes.
- · Training of relevant TNP staff on ecological monitoring continued.

## **6. Targets not attained**

- Preparation of a plant guide book by the National Herbarium of Tanzania (NHT).
- Finalization of a guidebook on butterflies of Tarangire NP and Lake Manyara NP.
- · Completion of MSc Thesis on Wildlife Ecology by Ms Msoffe. Delay in completion was attributed to a six month delay in starting the research work.

# 7. Action(s) taken to overcome constraints and obstacles

The NHT recruited two qualified staff who have started to actively participating in the preparation of the plant guidebook mentioned above. Closer follow-up was made to ensure speedy preparation of the same.

### 8. Prospects for the accomplishment of the project's objectives

The implementation of project activities is going well and prospects for accomplishing all project objectives seems high.

### 9. Lesson learned during the period under review

A well designed, explicit, and shared performance monitoring system is key to assessing progress against stakeholders' expectations and to achieve project objectives.

### 10. Planned targets and activities for the next reporting period

- · Finalize preparation of plant guidebook for Tarangire NP.
- Procure and install hardware and software for a GIS center and start training selected staff in GIS mapping.
- Assist in establishment of desktop publishing unit at TANAPA headquarters and continue with hand on training of TANAPA staff on desktop publishing.
- Continue with data collection for water quality analysis for Tarangire River and related wetlands of Tarangire NP.
- · Provide Technical and scientific assistance to the MSc candidate.
- · Finalize the guidebook on butterflies of Tarangire NP and Lake Manyara NP.
- · Continue with inventory of birds, reptiles, and amphibians.
- · Carry out mid-term evaluation of the project.
- Continue training of TNP staff on GIS.
- Facilitate preparation of land use maps in a participatory way with selected villages of Pahi Ward in Kondoa, Endamarariek Ward in Karatu, and Hassama Villages in Mbulu Districts.
- Raise 200,000 tree seedlings for planting on the degraded slopes of both Lake Babati and Manyara.

11. Other comments	
None	

### 12. Acronyms

AOP Annual Operation Plan (plan showing activities of all partners)

CA Co-operation Agreement
 DOI Department of Interior (USA)
 FIDE Friends In Development

GIS Geographical Information SystemLMNP Lake Manyara National Park

MBK Mazingira Bora Karatu

NHT National Herbarium of TanzaniaSRF Systematic Reconnaissance Flight

TANAPA Tanzania National Parks

TCP (OIKOS) Tarangire Conservation Program

TNP Tarangire National Park

TPO Tanzania Program Office (WWF)

USAID United States Agency for International Development

WWF World Wildlife Fund

### 13. Acknowledgements

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